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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,876	04/27/2001	Steven P. Ungetheim	93214.032	1747

7590 01/05/2004

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Scottsdale, AZ 85254

EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/844,876

Applicant(s)

UNGETHEIM ET AL.

Examiner

Charles A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment C filed on October 3, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen, Jr in view of Eisen. Petersen, Jr. et al. (herein Petersen) US 6,179,545 teaches a vehicular ramp adapted for wheelchair access to said vehicle, said ramp comprising:

- a drive mechanism (18) located below the floor of said vehicle;

- a rotor shaft (70) parallel with the hinge (16) to said ramp;

- a pair of arms (28) coupled to said rotor shaft;

- said ramp includes a bracket (30) on each side;

said drive mechanism includes a pair of shafts (not numbered) coupling the arms (28) to the brackets (30), whereby rotation of the rotor shaft causes rotation of the ramp about said hinge (16). Petersen does not teach the drive assembly as being below the hinge of the folding ramp. Eisen US 5,612,515 teaches a ramp assembly comprising:

- a base assembly (12);

- a ramp assembly (14) that is foldable relative to said base assembly;

wherein said base assembly comprises:

- an electric motor (68);

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a rotor shaft (64) with arms (62) attached;
rods (83) attached to said arms wherein said rods are located below the
hinge (66) that the ramp (14) pivots about.

brackets (56) on said ramp;

wherein said brackets are attached to said rods (83) to cause rotation of the ramp when rotor shaft (64) is moved. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Petersen with an actuation assembly as taught by Eisen in order to allow the ramp to be folded mechanically while keeping the moving part covered, thereby preventing the device from injuring anyone near the device.

Claim 2,4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen in view of Eisen as applied to claim 11 above, and further in view of Vartanian. In regards to claim 2 Petersen in view of Eisen teach the limitations of claim 11 as above, they further teach the drive mechanism can be an electric motor, Petersen does not teach using a gear motor to drive their mechanism. Vartanian US 5,542,811 teaches a wheelchair lift for vehicles that is driven by a gear motor (138). It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Petersen with a gear motor as taught by Vartanian in order to increase the torque of the drive motor without increasing the size of the motor, thereby allowing a smaller motor to lift a heavier load.

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In regards to claim 4 Petersen discloses a sensor (48) that signals the power to the drive mechanism be stopped once the ramp has reached a predetermined position during deployment. See column 7 lines 29-47.

In regards to claim 6 Petersen also discloses the rotor shaft is supported by a pair of bearings (62).

Claims 5 & 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen, Eisen and Vartanian as applied to claims 2 and 4 above, and further in view of Roth-Stielow et al. Petersen, Eisen and Vartanian teaches the limitations of claims 2 and 4 above, they also teach using a resistive load to brake the fall of the ramp during deployment. They do not teach using a heat dissipating load to brake the movement of the ramp. Roth-Stielow et al. US 6,081,086 teaches an apparatus for electrically braking a motor comprising:

- a heat dissipating load in the form of a braking resistor (3);

- a switch (21) for switching current from said motor to said braking system;

- a diode (D) in series with said resistor (3) (see figure 1).

It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the apparatus taught by Petersen, Eisen and Vartanian with the braking system taught by Roth-Stielow et al. in order to brake the ramp using a well know technology (regenerative braking) in such a manner that installation and manufacturing cost can be reduced as well as protecting the overall system from thermal damage by releasing the heat generated to the ambient surroundings.

Response to Amendment

The amendments to the claims filed on October 10, 2003 have been entered into the record.

Response to Arguments

Applicant's arguments with respect to claim 11 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

CAF

CAF

12-22-03


EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600